UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,959	04/30/2001	Charu Aneja	RCA 90,192	4491

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JOSEPH S. TRIPOLI
THOMSON MULTIMEDIA LICENSING INC.
2 INDEPENDENCE WAY
P.O. BOX 5312
PRINCETON, NJ 08543-5312

EXAMINER
TRAN, TRANG U

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

		Application No.	Applicant(s)
Office Action Summary		09/845,959	ANEJA ET AL.
		Examiner	Art Unit
		Trang U. Tran	2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Objections

1.   Claim 10 is objected to because of the following informalities: the phrase "the method of claim 11" should be changed to "the method of claim 9". The examiner assumes that claim 10 is depends to claim 9 for art rejection purposes. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 14-15 recite the limitation "each of the headers" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

4.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5.   Claims 1 and 11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/845,955 in view of Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 1 of this application, claim 1 of copending Application No. 09/845,955 recites storing a pixmap; detecting whether a displaying mode is in the first displaying mode or the second displaying mode; and adjusting the pixmap according to the detected displaying mode. However, claim 1 of copending Application No. 09/845,955 explicitly does not disclose the claimed a pixmap containing a plurality of pixel lines. Knox et al teaches that a region is often a rectangular area specified by its boundary and by a bit map defining its contents, the bit map is displayed in a plurality of OSD lines, where each OSD line represents a line of OSD pixels in an OSD region (col. 5, lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a pixmap containing a plurality of pixel lines as taught by Knox et al into the system of claim 1 of copending Application No. 09/845,955 in order to generate the OSD messages with plurality of pixel lines.

Claim 11 of this application is rejected for the same reason over claim 1 of copending Application No. 09/845,955 as discussed in claim 1 above.

This is a provisional obviousness-type double patenting rejection.

6.   Claims 9 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending

Application No. 09/845,955 in view of Knox et al. (US Patent No. 6,480,238 B1) and further in view of Min et al. (US patent No. 6,462,746 B1).

In considering claim 9 of this application, claim 1 of copending Application No. 09/845,955 recites storing a pixmap; storing a first header set containing one header; storing a second header set; detecting whether a displaying mode is in the first displaying mode or the second displaying mode; and adjusting the pixmap according to the detected displaying mode. However, claim 1 of copending Application No. 09/845,955 explicitly does not disclose 1) the claimed a pixmap containing a plurality of pixel lines and 2) the claimed the second header set containing a plurality of headers.

1) Knox et al teaches that a region is often a rectangular area specified by its boundary and by a bit map defining its contents, the bit map is displayed in a plurality of OSD lines, where each OSD line represents a line of OSD pixels in an OSD region (col. 5, lines 1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a pixmap containing a plurality of pixel lines as taught by Knox et al into the system of claim 1 of copending Application No. 09/845,955 in order to generate the OSD messages with plurality of pixel lines.

2) Min et al teach that Fig. 7 shows an OSD memory structure in a digital video display unit according to the present invention comprising a command area 100 including an OSD global header controlling information of multiple OSD regions displayed on a screen and OSD local headers 0-15 containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col. 8, line 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate

the command area including an OSD global header and multiple OSD local headers as

taught by Min et al into the system of claim 1 of copending Application No. 09/845,955

in order to minimize a size of the memory occupied by the command and to allow an

external host processor to control the command more effectively.

Claim 19 of this application is rejected for the same reason over claim 1 of

copending Application No. 09/845,955 as discussed in claim 9 above.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8.   Claims 1-2, 11-12 and 16 are rejected under 35 U.S.C. 102(e) as being

anticipated by Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 1, Knox et al discloses all the claimed subject matter, note 1)

the claimed storing a pixmap containing a plurality of pixel lines is met by the OSD unit

150 (Fig. 1, col. 4, line 64 to col. 5, line 9), 2) the claimed detecting whether a displaying

mode is in the first displaying mode or the second displaying mode is met by the

processor 130 which detects the Field Doubling mode or Non-Field Doubling mode

(normal mode) (Figs. 3 and 4, col. 6, line 24 to col. 7, line 65), and 3) the claimed

adjusting the pixmap according to the detected displaying mode is met by the OSD unit

150 (Fig. 3, col. 6, line 24 to col. 7, line 27).

In considering claim 2, Knox et al discloses all the claimed subject matter, note 1)

the claimed storing a first header set is met by the OSD bitstream (Fig. 2, col. 5, line 21

to col. 6, line 22), 2) the claimed storing a second header set is met by the OSD

bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 3) the claimed using the first header

set to adjust the pixmap to fit the first raster size when the detected displaying mode is

the first displaying mode is met by the OSD header 1 which located for OSD 1 region

352 (Fig. 3, col. 6, lines 24-39), and 4) the claimed using the second header set to

adjust the pixmap to fit the second raster size when the detected displaying mode is the

second displaying mode is met by the OSD header 2 which located for OSD 2 region

354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

Claims 11-12 are rejected for the same reason as discussed in claims 1-2,

respectively.

In considering claim 16, the claimed wherein the first displaying mode and the

second displaying mode display a different number of pixel lines and a different number

of pixels in each of the displayed pixel lines is met by different regions 352 and 354 (Fig.

3, col. 6, line 24 to col. 7, line 27).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knox et al. (US Patent No. 6,480,238 B1).

In considering claim 17, Knox et al disclose all the limitations of the instant invention as discussed in claims 11-12 and 16 above, except for providing the claimed wherein the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels. Using the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels is old and well known in the art. Therefore, the Official Notice is taken. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the old and well known the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels into Knox et al's system in order to increase the flexibility of the system by displayed the OSD data in different aspect ratio.

In considering claim 18, Knox et al disclose all the limitations of the instant invention as discussed in claims 11-12 and 16 above, except for providing the claimed wherein the first displaying mode is 2H mode and the second displaying mode is 2.14H mode. Using the first displaying mode is 2H mode and the second displaying mode is 2.14H mode is old and well known in the art. Therefore, the Official Notice is taken. It

would have been obvious to one of ordinary skill in the art at the time of the invention to

incorporate the old and well known the first displaying mode is 2H mode and the second

displaying mode is 2.14H mode into Knox et al's system in order to increase the

flexibility of the system by displayed the OSD data in different aspect ratio.

11.   Claims 3-10, 13-15 and 19-20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Knox et al. (US Patent No. 6,480,238 B1) in view of Min et al. (US

patent No. 6,462,746 B1).

In considering claim 3, Knox et al disclose the claimed further comprising the

steps of: chaining the headers in the first header set and chaining the headers in the

second header set is met by the OSD region coordinates 214 which include a "next

header pointer" 244 for pointing to the next header block in the memory 140 (Fig. 2, col.

5, lines 45-65). However, Knox et al explicitly does not disclose the claimed wherein the

first and second header sets contain a plurality of headers. Min et al teach that Fig. 7

shows an OSD memory structure in a digital video display unit according to the present

invention comprising a command area 100 including an OSD global header controlling

information of multiple OSD regions displayed on a screen and OSD local headers 0-15

containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col.

8, line 30). Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to incorporate the command area including an OSD global header

and multiple OSD local headers as taught by Min et al into Knox et al's system in order

to minimize a size of the memory occupied by the command and to allow an external

host processor to control the command more effectively.

In considering claim 4, Knox et al discloses all the claimed subject matter, note 1) the claimed further comprising the steps of: using each of the headers in the first header set to point to one of the pixel lines in the pixmap in the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and 2) the claimed using each of the individual headers in the second header set to point to one of the pixel lines in the pixmap in the second displaying mode is met by the OSD header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

In considering claim 5, the claimed further comprising the steps of: using each of the headers in the first header set to select a number of pixels in each of the pixel lines in the first displaying mode and using each of the headers in the second header set to select a number of pixels in each of the pixel lines in the second displaying mode is met by the OSD local header information (Fig. 8, col. 7, line 54 to col. 9, line 20) of Min et al.

In considering claim 6, the claimed wherein the first displaying mode and the second displaying mode display a different number of pixel lines and a different number of pixels in each of the displayed pixel lines is met by different regions 352 and 354 (Fig. 3, col. 6, line 24 to col. 7, line 27) of Knox et al.

In considering claim 7, the combination of Knox et al and Min et al disclose all the limitations of the instant invention as discussed in claims 1-6 above, except for providing the claimed wherein the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying mode displays 540 pixel lines with each of the pixel lines containing1920 pixels. Using the first displaying mode displays 480 pixel lines with each of the pixel lines containing 2096 pixels, and the

second displaying mode displays 540 pixel lines with each of the pixel lines

containing1920 pixels is old and well known in the art. Therefore, the Official Notice is

taken. It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the old and well known the first displaying mode displays 480

pixel lines with each of the pixel lines containing 2096 pixels, and the second displaying

mode displays 540 pixel lines with each of the pixel lines containing1920 pixels into the

combination of Knox et al and Min et al's system in order to increase the flexibility of the

system by displayed the OSD data in different aspect ratio.

In considering claim 8, the combination of Knox et al and Min et al disclose all the

limitations of the instant invention as discussed in claims 1-6 above, except for providing

the claimed wherein the first displaying mode is 2H mode and the second displaying

mode is 2.14H mode. Using the first displaying mode is 2H mode and the second

displaying mode is 2.14H mode is old and well known in the art. Therefore, the Official

Notice is taken. It would have been obvious to one of ordinary skill in the art at the time

of the invention to incorporate the old and well known the first displaying mode is 2H

mode and the second displaying mode is 2.14H mode into the combination of Knox et al

and Min et al's system in order to increase the flexibility of the system by displayed the

OSD data in different aspect ratio.

In considering claim 9, Knox et al discloses all the claimed subject matter, note 1)

the claimed storing a pixmap containing a plurality of pixel lines is met by the OSD unit

150 (Fig. 1, col. 4, line 64 to col. 5, line 9), 2) the claimed storing a first header set

containing one header is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line

22), 3) the claimed storing a second header set is met by the OSD bitstream (Fig. 2, col. 5, line 21 to col. 6, line 22), 4) the claimed detecting whether a displaying mode is in the first displaying mode or the second displaying mode is met by the processor 130 which detects the Field Doubling mode or Non-Field Doubling mode (normal mode) (Figs. 3 and 4, col. 6, line 24 to col. 7, line 65), and 4) the claimed adjusting the pixmap according to the detected displaying mode is met by the OSD unit 150 (Fig. 3, col. 6, line 24 to col. 7, line 27). However, Knox et al explicitly does not disclose the claimed storing the second header set contain a plurality of headers.

Min et al teach that Fig. 7 shows an OSD memory structure in a digital video display unit according to the present invention comprising a command area 100 including an OSD global header controlling information of multiple OSD regions displayed on a screen and OSD local headers 0-15 containing characteristic information of the OSD information (Fig. 7, col. 7, line 32 to col. 8, line 30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the command area including an OSD global header and multiple OSD local headers as taught by Min et al into Knox et al's system in order to minimize a size of the memory occupied by the command and to allow an external host processor to control the command more effectively.

In considering claim 10, Knox et al discloses all the claimed subject matter, note 1) the claimed using the first header set to adjust the pixmap to fit the first raster size when the detected displaying mode is the first displaying mode is met by the OSD header 1 which located for OSD 1 region 352 (Fig. 3, col. 6, lines 24-39), and 2) the

claimed using the second header set to adjust the pixmap to fit the second raster size

when the detected displaying mode is the second displaying mode is met by the OSD

header 2 which located for OSD 2 region 354 (Fig. 3, col. 6, line 40 to col. 7, line 28).

Claims 13-15 are rejected for the same reason as discussed in claims 3-5,

respectively.

Claim 19 is rejected for the same reason as discussed in claim 9.

Claim 20 is rejected for the same reason as discussed in claim 10.

Conclusion

12.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Knox et al. (US Patent No. 6,175,388 B1) disclose apparatus and method for

generating on-screen display messages using on-bit pixels.

Toba (US Patent No. 6,144,414) discloses image recording and reproduction

apparatus.

Lie (US Patent No. 5,936,606) discloses on-screen edit/display controller.

13.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-**

0090.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **John W. Miller,** can be reached at **(703) 305-4795.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
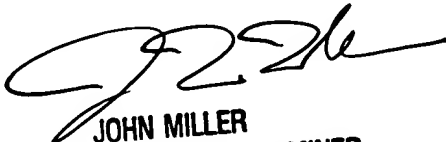
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

TT TT
September 4, 2003

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600